

# Pregabalin (Lyrica)

Pregabalin (Lyrica) is a GABA analog that binds to the nerve terminals of calcium channels and prevents calcium influx. This action inhibits the release of certain neurotransmitters. Pregabalin is indicated for seizures, neuropathic pain, and fibromyalgia. Side effects may include dizziness, somnolence, weight gain, headache, and angioedema. The patient should be warned about increased risks of developing rhabdomyolysis or drug dependence.



**PLAY PICMONIC** 

### Mechanism

### **GABA Analog**

#### GABA-goose On-a-log

By binding to the nerve terminals on calcium channels, pregabalin inhibits calcium influx and decreases the release of glutamate, norepinephrine, and substance P. Although the exact mechanism of action remains unknown, a decrease in these neurotransmitters helps control seizures and provides relief of neuropathic pain. Although pregabalin is a GABA analog, this drug does not enhance GABA's inhibitory actions.

## **Indications**

### Seizures

### Caesar

Although the exact mechanism of action remains unknown, pregabalin decreases seizures by decreasing abnormal electrical activity in the brain. Instruct the patient to continue taking this medication even if they are feeling fine.

## **Neuropathic Pain**

## Neuron-extremities with Pain-bolt

Pregabalin (Lyrica) modulates calcium channel activity to reduce the transmission of pain signals across the nervous system and decreases neuropathic pain. The medication is used to treat diabetic neuropathy associated with nerve damage (refer to the Picmonic on Diabetes Assessment). The drug also helps relieve neuropathic pain associated with spinal cord injury caused by the herpes zoster virus. Patients with fibromyalgia may also experience neuropathic pain relief while taking pregabalin.

### **Fibromyalgia**

## Fabio-mayo-algae

Pregabalin is an FDA-approved treatment for fibromyalgia, a chronic health condition causing generalized muscle pain and fatigue. Patients with fibromyalgia often experience pain relief with pregabalin, though individual responses and long-term efficacy may vary.

## **Side Effects**

## Headache

## Head-egg-lump

A small percentage of patients taking pregabalin experience headaches. The abrupt discontinuation of the drug may also cause headaches and should be consulted with the health care provider.

### **Dizziness**

## Dizzy-eyes

Dizziness is a common side effect of pregabalin that may decrease with continued use. Instruct the patient to avoid driving while taking the medication.



#### Ataxia

#### A-taxi

Ataxia is a lack of muscle coordination affecting speech, movement, and balance. It can be a side effect of pregabalin due to its impact on the central nervous system, which may disrupt normal neural signaling and motor control.

## Somnolence (Fatigue)

### Sleepy-guy

Somnolence, characterized by constant fatigue, is a common side effect of pregabalin. After discontinuing this medication, symptoms of constant tiredness should disappear. Instruct the patient to avoid hazardous activity such as driving.

## Weight Gain

## Up-arrow Scale

Pregabalin causes weight gain in a small percentage of patients. This medication may cause an increase of 7% or more in body weight in just a few months.

### Angioedema

## Angel-edamame

Angioedema, a rapid swelling of the face, tongue, lips, throat, and larynx, is caused by hypersensitivity reactions. A small percentage of patients have reported allergic-type symptoms, including angioedema, while taking pregabalin. If symptoms occur, immediately contact the healthcare provider.

### Rhabdomyolysis

### Rabbit-muscle-lights

Although rhabdomyolysis has not been clearly associated with pregabalin, the patient should be instructed to report muscle pain, tenderness, or weakness to the healthcare provider. Suspected symptoms of rhabdomyolysis warrant discontinuation of the drug.

### Considerations

### **Dependence**

### Dependence Ball-and-chain

Since a small percentage of patients taking pregabalin experience euphoria, this medication has a risk of abuse and dependency in patients seeking pain relief. The medication is classified under Schedule V of the Drug Enforcement Agency's Controlled Substances Act.